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Does a higher 'quality points' score mean better care in stroke? An audit of general practice medical records

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ABSTRACT

Background The Royal College of Physicians (RCP) have produced guidelines for stroke management in primary care; this guidance is taken to be the gold standard for the care of people with stroke. UK general practitioners now have a quality-based contract which includes a Quality and Outcomes Framework (QOF). This consists of financially remunerated 'quality points' for specific disease areas, including stroke. Achievement of these quality points is measured by extracting a limited list of computer codes from practice computer systems.
Objectives To investigate whether a high stroke quality score is associated with adherence to RCP guidelines.
Design Examination of computer and written medical records of all patients with a diagnosis of stroke.
Setting Two general practices, one in southwest London, one in Surrey, with a combined practice population of over 20 000. Both practices had a similar age–sex profile and prevalence of stroke.
Results One practice scored 93.5% (29/31) of the available stroke quality points. The other practice achieved 73.4% (22.75/31), and only did better in one stroke quality target. However, the practice scoring fewer quality points had much better adherence to RCP guidance: 96% of patients were assessed in secondary care compared with 79% (P=0.001); 64% of stroke patients were seen the same day, compared with 44%; 56% received rehabilitation compared with 37%.
Conclusions Higher quality points did not reflect better adherence to RCP guidance. This audit highlights a gap between relatively simplistic measures of quality in the QOF, dependent on the recording of a narrow range of computer codes, and the actual standard of care being delivered. Research is needed to see whether this finding is generalisable and how the Quality and Outcomes Framework might be better aligned with delivering best practice.

Keywords: general practice medical records, Quality and Outcomes Framework, stroke management guidelines

Introduction

Stroke is the commonest cause of handicap and third commonest cause of death in developed countries.[1,2] It causes 1.8 deaths per 1000 annually in the United Kingdom (UK).[3] Its incidence is 1.3 to 2.2 per 1000,[4,5] and for transient ischaemic attack (TIA) 0.4 per 1000, of whom 16% progress to a stroke within a month.[6] Prevalence of stroke is 2 per 1000 for men and 1.4 per 1000 for women.[7] Hypertension, smoking, atrial fibrillation, diabetes mellitus, increased alcohol consumption, hyperlipidaemia, increased body mass index (BMI over 27.8 kg/m^2) and physical inactivity are independent modifiable risk factors for stroke.[7–9]

Effective management for these includes: ACE inhibition; warfarin; aspirin; statins[3] and smoking cessation.[10] Early brain scans[11] and specialist management offer additional benefits to patients.[12] Stroke management cost the National Health Service (NHS)[13] £2.3 billion in 1995–1996.[14] Its importance is reflected by its inclusion in National Service Frameworks for Coronary Heart Disease[15] and Older People.[16] The Royal College of Physicians (RCP) has recently published evidence-based guidelines for stroke, including a primary care version.[17] These guidelines include: admission to hospital; referral to specialist services and rehabilitation. For the purpose of this study we have taken these as the gold standard for stroke management.

In addition, ten financially incentivised quality targets for stroke management (see Box 1)[18] were included in the new contract for general practice, introduced in the UK in April 2004. They form part of the 'Quality and Outcomes Framework' (QOF) for general practice. These have different criteria from the RCP primary care stroke guidance. To earn quality points, practitioners record clinical information on their clinical computer system using a specified range of Read codes.[19] Only recording of the defined diagnostic codes will include patients within the target population or disease register; however, there are also specific exemption codes which enable patients to be excluded, for example a patient who refuses treatment. Risk factors have to be coded within a specified time-scale. All these specified structured data are collected and analysed within the general practice (GP) computer system, then converted into 'quality points'; the scores are then conveyed to a national central database. The higher the level of points achieved the greater the financial incentive received by the practice. With quality assessments now in the public domain[20] patients might expect that points for stroke are associated with quality of management.

We carried out this audit to explore whether a high general practice QOF score for stroke, based entirely on computer data, provided a useful surrogate marker for the quality of care in stroke, using RCP guidelines as the gold standard.

Method

The study population was two training practices of similar list size (practice 1: 11 005; practice 2: 9462). Practice 1 was located in Surrey, practice 2 in a more mixed area of southwest London. Both practices have a larger number of patients of working age and fewer elderly compared with the 2001 census population for England and Wales[21] (see Figure 1). Data were collected in November 2004.

Both practices use the EMIS computer system,[22] which contains an application called 'Population Manager', which records the number of quality points achieved.

Computer data is either Read-coded or free-text. Diagnosis and key findings, such as blood pressure (BP), are usually Read-coded during consultation using either 'picking lists' or templates. Laboratory test results were Read-coded automatically in both practices as they were transmitted automatically by computer

Box 1 The ten stroke QOF targets for general practice; the targets apply to the percentage (%) of patients recorded in the disease register

STROKE 1. The register of patients with stroke or TIA defined by a list of Read codes (see Table 1).
STROKE 2. The percentage of new patients with presumptive stroke (presenting after 1 April 2003) who have been referred for confirmation of the diagnosis by CT or MRI scan.
STROKE 3. The percentage with a record of smoking status in the last 15 months, except those who have never smoked where smoking status should be recorded at least once since diagnosis.
STROKE 4. The percentage who smoke and whose notes contain a record that smoking cessation advice or referral to a specialist service, if available, has been offered in the last 15 months.
STROKE 5. The percentage who have a record of BP in the notes in the preceding 15 months.
STROKE 6. The percentage in whom the last BP reading (measured in last 15 months) is 150/90 or less.
STROKE 7. The percentage with a total cholesterol measured in the last 15 months.
STROKE 8. The percentage whose last measured total cholesterol (measured in last 15 months) is 5 mmol/l or less.
STROKE 9. The percentage with non-haemorrhagic stroke, or a history of TIA, who have a record that aspirin, an alternative antiplatelet therapy or an anticoagulant is being taken (unless a contraindication or side effects are recorded).
STROKE 10. The percentage who have had influenza immunisation in the preceding 1 September to 31 March.

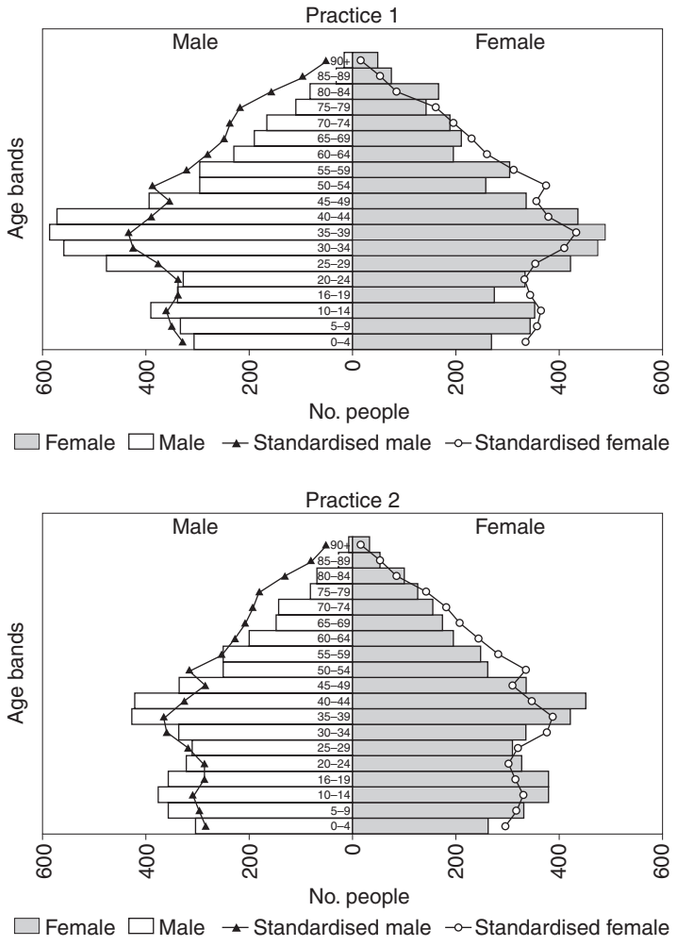

Figure 1 Age–sex pyramids for the practices compared with the population of England and Wales (2001 Census)

links from their local pathology laboratory. Other data were free-text entries in the computer record, or scanned-in letters, which are stored as image files.

A Read code browser[23] was used to identify the different ways that cerebrovascular disease could be recorded. We also looked at the codes which appeared in the picking lists when likely diagnostic terms (for instance 'stroke') were entered to see which codes were prominent (see Figure 2).

Coded data were collected using MIQUEST (Morbidity Information Query and Export Syntax – a Department of Health-commissioned data extraction application)[24] which has been designed to allow the extraction of anonymised data. A manual search was carried out to identify relevant free-text data in both computerised and paper records back to the date of the first coded stroke.

Audit criteria based on RCP guidelines[17] (see Box 2) were used. Prevalence of stroke and TIA was standardised using the 2001 census.[25] Predictive value of codes for stroke was assessed. A stroke code without supporting clinical data was labelled a false positive. We audited the quality of care using the criteria and standards of the general practice quality-based contract and RCP stroke guidance.

Statistical methods

Data were analysed in SPSS (Statistical Package for Social Sciences – Version 12). The independent samples *t*-test was used to compare normally distributed physiological variables (such as blood pressure, cholesterol), and the chi-square test to compare proportions of patients below or at target. The Mann-Whitney U test was used for non-parametric data.

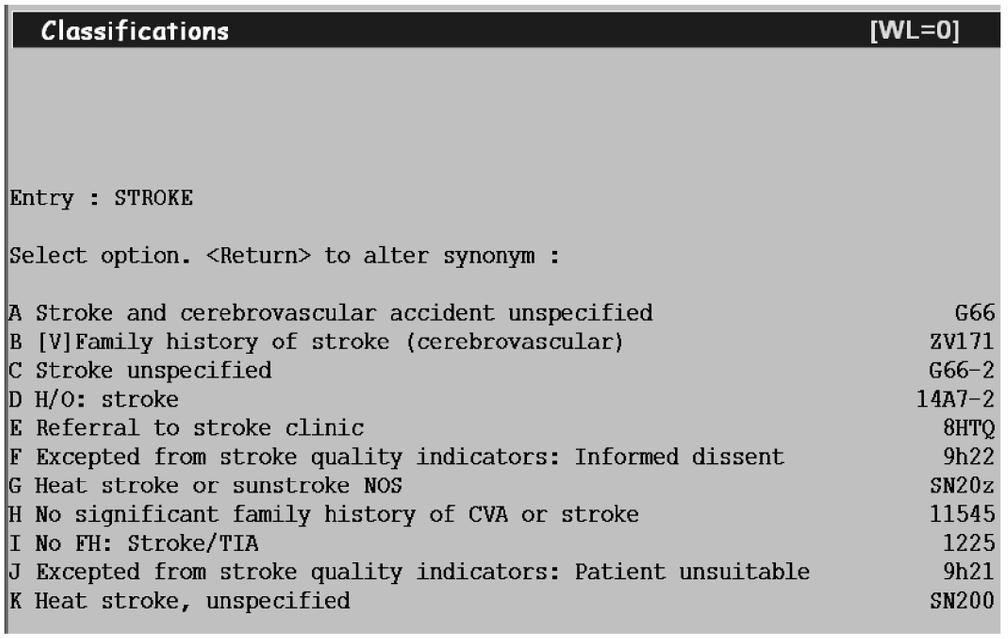

Figure 2 Picking list which appears when the term 'stroke' is entered

Box 2 Audit criteria for assessing the GP management of stroke using the RCP guidelines as the gold standard

Prevalence of stroke and TIA
- Prevalence of people assigned a computer diagnosis of stroke or TIA.
- Calculation of the positive predictive value of diagnostic codes for stroke and TIA. Identify whether codes are used which fall outside the GP contract quality targets.

Acute assessment and management
- The time taken between diagnosis and assessment.
- RCP: brain scan and seen in secondary care within 1 day (TIA 7 days).
- GP contract: referral for confirmation of diagnosis and brain scan after 1 April 2003.
- Received rehabilitation.

Risk factor monitoring/quality of secondary prevention
- BP: <150/90 (GP contract); <140/85 (RCP).
- BP in diabetics: <145/85 (GP contract); <130/80 (RCP).
- Cholesterol: <5 mmol/l (GP contract); <3.5 mmol/l (RCP).
- Smoking status, BMI, alcohol intake.

Drug therapy
- Antiplatelet therapy (or recorded contraindicated) for non-haemorrhagic stroke/TIA.
- Warfarin use in patients with atrial fibrillation.
- Use of ACE inhibitors or thiazides.
- Flu vaccination.

Ethics

This audit set out to explore adherence to the new RCP guidance for the management of stroke.[7] It has the characteristics of an audit (listed in reference document found on the NHS Central Office for Research Committees site[26]) as it: tests care against knowledge; measures against standards; did not involve clinical

management, randomisation or therapy; and was carried out in a small sample in a short time. We believe it is of interest because it highlights an area requiring further research.[27]

Results

Computer data quality

We identified 314 people who had a disease code in their computerised medical record implying cerebrovascular disease. Two sets of notes were missing and therefore excluded, leaving 312 notes which underwent detailed manual review.

A total of 199 were confirmed from a search of the notes and computer record to have had a stroke or TIA (see Table 1), giving an overall positive predictive value (PPV) of 64% (199/312). Most of the invalid codes in the group excluded from the quality targets were for vertebrobasilar insufficiency – usually diagnosed clinically. However, two codes in the invalid group (codes G6z and 14A7, see Table 1) had high PPVs for stroke: 83.3% and 100% respectively. The prominence of the 14A7 code (code for 'history of stroke') in the Read code picking lists (see Figure 2) may account for its relatively high level of use.

A total of 230 people were identified from the stroke QOF disease register. The diagnostic codes included in the stroke QOF disease register had a PPV of 80% (184/230). Fifteen people with stroke or TIA were not included in the QOF stroke register. Most of the invalid codes in these 15 people were for codes starting G66 (TIA codes).

Prevalence of stroke and TIA

Of the 199 patients who were confirmed from a detailed records search to have stroke or TIA: 104 were in practice 1 and 95 in practice 2, giving a crude prevalence of 5.8 per 1000 for stroke and 4.0 per 1000 for TIA (see Table 2). Prevalence for TIA and cerebro vascular accident (CVA) increased with age except in males over 85. CVA is more prevalent in males, TIA in females. The age-standardised prevalences of CVA and TIA were 6.8 per 1000 and 4.4 per 1000 (practice 1); and 7.9 per 1000 and 5.8 per 1000 (practice 2). For brevity, from this point on, we use the term 'stroke' to include all people with either stroke or TIA.

QOF points achieved

Practice 1 achieved more QOF points for eight stroke targets, equal for target 6, and less in target 10. Overall scores were 29/31 for practice 1 and 22.75/31 for practice 2. These are set out in Table 3.

Acute assessment and management of patients with stroke

A significantly lower proportion of patients were recorded as being seen in secondary care in practice 1 (78.8%, 82/104) compared with practice 2 (95.8%, 91/95; P=0.001 chi-square test). However, for those patients referred to secondary care there was no difference in the time waiting to be seen. In both practices less than 7% of this data was coded (see Table 4); data had to be obtained from manual searches.

Practice 1 scored 2 out of 2 QOF points (see Table 3) for carrying out brain scans on all patients with a new diagnosis since 1 April 2004, whereas practice 2 scored only 0.21. In both practices less than 10% of this data was coded (see Table 4). However, review of all the data showed that only 49% (51/104) of patients in practice 1 had had a scan compared with 63.2% (60/95) in practice 2; the difference in proportion is just significant (P=0.045 chi-square test). The main reason for this difference is that a significantly smaller proportion of patients with TIA in practice 1 had had a scan: 29.3% (12/41) compared with 50% (20/40) in practice 2 (P=0.019 chi-square test – see Table 5).

Secondary prevention in patients with stroke and TIA

Stroke QOF targets 3, 5 and 7 (see Box 1) refer to risk factor recording. Practice 1 scored the maximum 7 points for these, whereas practice 2 scored 5.15. Searching the entire medical record showed the difference between the practices was a problem with computer data quality, not clinical care. The practices had recorded 100% (104/104) and 99% (94/95) of patients' BP; 94% (98/104) and 95% (90/95) had cholesterol readings; and 97% (101/104) and 93% (88/95) had their smoking status records; BMI had been entered in 91% and 73%, and alcohol intake in 85% and 66% for practices 1 and 2 respectively.

Stroke QOF targets 6 and 8 reward achievement of targets for the management of BP and cholesterol. Practice 1 scored 10 points, the maximum; practice 2 achieved 8.02. However, the mean systolic in practice 1

Table 1 The positive predictive value (PPV) of diagnostic codes used for stroke and TIA

Codes *included* in the stroke quality targets					Codes *excluded* from the stroke quality targets				
Code	Simplified description	PPV	No. identified	No. confirmed	Code	Simplified description	PPV	No. identified	No. confirmed
G61	Intercerebral haemorrhage	50	4	2	G6z	Cerebrovascular disease	100	1	1
G611	Internal capsule haemorrhage	100	1	1	G6	Cerebrovascular disease	86	7	6
G614	Pontine haemorrhage	100	1	1	14A7	History of CVA/stroke	83	6	5
G61z	Intercerebral haemorrhage	100	1	1	F4236	Amaurosis fugax	0	11	0
G61X	Intercerebral haemorrhage	100	1	1	G60	Subarachnoid	0	5	0
G64	Cerebral artery occlusion	100	1	1	G60z	Subarachnoid	13	8	1
G640	Cerebral thrombus	100	2	2	G600	Ruptured Bury aneurysm	0	1	0
G64z	Cerebral infarction	89	9	8	G603	Subarachnoid	0	1	0
G64z2	Cerebral infarction	100	2	2	G604	Subarachnoid	0	1	0
G64z3	Cerebral infarction	100	1	1	G631	Carotid artery occlusion	33	3	1
G65	TIA	75	88	66	G634	Carotid artery stenosis	0	3	0
G650	Basilar artery syndrome	0	5	0	G655	Transient global amnesia	0	2	0
G651	Vertebral artery syndrome	0	1	0	G656	Vertebrobasilar insufficiency	3	30	1
G6510	Vertebral artery syndrome	0	1	0	G672	Hypertensive encephalopathy	0	1	0
G652	Subclavian steal syndrome	0	1	0	G673	Cerebral aneurysm	0	2	0
G65y	TIA	100	1	1					
G65z	TIA	100	2	2					
G65zz	TIA	71	14	10					
G66	Stroke/CVA	91	76	69					
G667	Left-sided CVA	100	9	9					
G668	Right-sided CVA	78	9	7					
Total			230	184				82	15

Table 2 Standardised prevalence of stroke and TIA by age and gender

Prevalence	Population				Female		Male	
	Practice 1 (P1)		Practice 2 (P2)		P1	P2	P1	P2
	%	*n*	%	*n*	%	%	%	%
Stroke								
0–24	0.00	0	0.03	1	0.00	0.05	0.00	0.00
25–54	0.07	4	0.07	3	0.04	0.09	0.09	0.05
55–64	1.22	11	1.25	10	0.90	1.03	1.52	1.46
65–74	2.42	15	2.73	13	1.70	1.98	3.21	3.57
75–84	5.63	23	9.36	23	3.92	7.14	8.13	12.87
85+	6.55	10	9.14	5	9.15	7.89	0.00	12.19
Total	0.68	63	0.79	55	0.67	0.73	0.68	0.86
TIA								
0–24	0.0	0	0.0	0	0.0	0.0	0.0	0.0
25–54	0.0	2	0.0	1	0.1	0.0	0.0	0.0
55–64	0.1	1	0.7	6	0.2	0.5	0.0	1.0
65–74	2.7	17	2.7	13	2.8	3.2	2.5	2.2
75–84	3.5	14	6.8	17	2.0	8.4	5.6	4.3
85+	4.8	7	5.6	3	3.7	7.9	7.6	0.0
Total	0.4	41	0.6	40	0.5	0.8	0.4	0.4
Practice total		104		95				

Table 3 QOF points gained for the management of stroke

Target no.	Brief target name	Points available	% at target	Points awarded	% at target	Points awarded
			Practice 1		Practice 2	
1	Disease register	4	No target	4.00	No target	4.00
2	Brain scan	2	89	2.00	31	0.21
3	Smoking status	3	97	3.00	69	2.04
4	Smoking advice	2	83	2.00	62	1.62
5	BP measure	2	95	2.00	86	1.89
6	BP <150/90	5	78	5.00	73	5.00
7	Cholesterol measure	2	91	2.00	65	1.22
8	Cholesterol <5 mmol	5	68	5.00	46	3.02
9	Antiplatelet	4	91	4.00	74	3.01
10	Flu immunisation	2	4	0.00	47	0.74
Total points		31		29.00		22.75

Table 4 Source of data within practice records for brain scans, referral to secondary care and rehabilitation

	Referral to secondary care					Brain scan					Rehabilitation				
	Coded	Electronic letter	Computer free text	Written notes	No data	Coded	Electronic letter	Computer free text	Written notes	No data	Coded	Electronic letter	Computer free text	Written notes	No data
	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)
Practice 1															
	6.7 (7)	45.2 (47)	11.5 (12)	15.4 (16)	21.2 (22)	3.8 (4)	33.7 (35)	5.8 (6)	5.8 (6)	51.0 (53)	0.0 (0)	19.2 (20)	0.0 (0)	4.8 (5)	76.0 (79)
Practice 2															
	6.3 (6)	0.0 (0)	6.3 (6)	83.2 (79)	4.2 (4)	9.5 (9)	0.0 (0)	2.1 (2)	51.6 (49)	36.8 (35)	0.0 (0)	0.0 (0)	0.0 (0)	33.7 (32)	66.3 (63)

Table 5 Adherence to RCP guidance for brain scans, referral to secondary care and receipt of rehabilitation

	Total *n*	Secondary care *n*=173				Brain scan *n*=111 time data *n*=105				Rehabilitation *n*=57 time data *n*=53		
Stroke		*n*	<1d	%	Median	*n*	<1d	%	Median	*n*	<6m	%
Practice 1	63	56	28	44.4	1	39	13	20.6	14	23	23	36.5
Practice 2	55	55	35	63.6	0	38	9	16.4	2	31	26	47.3
Total	118	111	63	53.4	0	77	22	18.6	3	54	49	41.5
TIA	*n*	*n*	<7d	%	Median	*n*	<7d	%	Median	*n*	<6m	%
Practice 1	41	26	14	34.1	3	12	2	4.9	44	2	1	2.4
Practice 2	40	36	12	30.0	44	22	7	17.5	23	1	1	2.5
Total	81	62	26	32.1	14	34	9	11.1	23	3	2	2.5

Key: <1d = less than 1 day, <7d = seen in less than 7 days, <6m = seen in less than 6 months

was higher at 139.5 mmHg compared with 136.4 mmHg for practice 2. The mean diastolic was 78.4 mmHg for practice 1, again higher than the mean of 72.3 mmHg achieved in practice 2. This diastolic pressure difference is statistically significant ($P<0.001$ independent samples *t*-test).

Mean cholesterol levels were 4.9 mmol/l in both practices, indicating that roughly half of patients remained above the general practice quality target of 5 mmol/l. The proportion exceeding the tougher RCP threshold (3.5 mmol/l) was greater: 87% in practice 1 and 77% in practice 2.

The mean BMI in practice 2 was 1.9 kg/m^2 higher than practice 1 ($P=0.010$). However, both practices had a similar proportion above the overweight threshold of 27.8 kg/m^2, 35% ($n=33$) for practice 1 and 39% ($n=27$) for practice 2.

Drug therapy

Stroke QOF target 9 encourages appropriate antiplatelet and anticoagulant usage (see Box 1). Practice 1 scored 4 out of 4 and practice 2, 3.01. Eighty-five percent of those suffering from non-haemorrhagic stroke were prescribed an antiplatelet medication in practice 1 compared with 90% in practice 2. Of those patients not prescribed medication (15 in practice 1; nine in practice 2), only one from each practice had contraindications for aspirin listed. Four patients prescribed aspirin from practice 1 and seven from practice 2 had contraindications listed as well.

Generally drug data were complete, with both practices issuing computer-generated prescriptions. The only exception was the recording of aspirin, where there was inconsistent use of aspirin prophylaxis or OTC (over-the-counter) codes.

The majority of people with atrial fibrillation were prescribed warfarin: 59% (ten) in practice 1, and 70% (seven) in practice 2.

Our attempts to extract data about use of ACE inhibitors or thiazides in the treatment of hypertension failed. The data reported were extracted using the EMIS local search tool; it is therefore likely that the denominators were different, but the relative proportions are likely to be reliable. They indicate that 67% (54/81) and 85% (93/110) of hypertensive patients are taking ACE inhibitors or thiazides, in practices 1 and 2 respectively.

Practice 1 scored 0 QOF points and practice 2 scored 0.74 for target 10: influenza vaccination. However, flu vaccination clinics were ongoing during data collection, with practice 1 lagging behind.

Care of patients not within the General Medical Services (GMS) target lists

We could not detect any significant difference in recording of risk factors or management of the 15 patients who had stroke but were not included in the stroke disease register.

Discussion

Principal findings

There was no indication that a higher QOF score for stroke was associated with better quality of care. Poorer computer data quality in practice 2 meant it scored fewer quality points compared with practice 1, but its written records were more complete than practice 1's computerised equivalents. In both practices nearly all the data for brain scans, referral to secondary care and rehabilitation were not Read-coded. There remains considerable scope for improvement in computer data quality before they can be used to measure adherence to best practice.

Implications of the findings

Data entry issues should be taken into account when drawing up limited lists of codes to define disease registers. Codes prominent in the picking lists of the different computer systems (see Figure 2) are the ones clinicians may be more likely to use. The PPV and sensitivity of selected codes (see Table 1) should be calculated for each of the different GP clinical computer systems. We have found a 20% inflation of the stroke disease register, which if reproduced across the country would represent unnecessary overpayment, work and inconvenience for patients called in for review. At the same time, codes outside the stroke register with very high PPVs are not included.

Integrated computerised clinical records are a major component of the NHS National Programme for Information Technology.[28] If the potential benefit for patients is to be realised then some of the gaps in data quality identified here need to be addressed; additionally, the Quality and Outcomes Framework for general practice needs to better reflect the quality of care provided.

It is possible to identify those codes which have a high PPV for stroke and to make sure that these are included in the Quality Framework and to exclude those codes which are not.

For both practices there is scope for improvements in risk factor management. Factors currently outside the practices' control, particularly what secondary care services are commissioned, will also contribute to the difference in quality between these practices. Practice and locality based commissioning may provide a mechanism to address these issues.[29]

Limitations of the study

Both practices used the EMIS computer system; other brands of GP computer system might generate a different set of data quality issues.

It is possible that these practices have more advanced medical records, in that both are training practices and would have had their notes inspected as part of their training practice assessment.[30] Although we identified the PPV of codes for stroke and TIA, we did not seek false negatives (that is, patients with stroke but who did not have the diagnosis recorded), therefore we could not estimate the sensitivity of the diagnostic codes. Both PPV and sensitivity usually are examined when looking at data quality;[31] they should be taken into account when selecting codes that will trigger inclusion or exclusion from a target population.

Comparison with the literature

Problems with the PPV of computer diagnoses, and variation between computer systems, are not unique to stroke; we have reported similar problems with chronic obstructive pulmonary disease[32] and osteoporosis.[33] These problems may exist more broadly.

The age-standardised prevalence of stroke within the study population was 7.3 per 1000 (crude rate 5.8 per 1000). This is higher than 1998 data of 2.0 per 1000.[25] Practice 2 is in a more deprived area, which may account for the higher prevalence.[34] The PPV of a computer diagnosis is similar to the study by Mant *et al* 71.8%.[35]

Claims that the quality-based GP contract will result in improved outcomes[36] should be treated with caution. Whilst this audit confirms scope to improve care in both primary and secondary sectors, there was a larger gap in quality of data.

Call for further research

A similar study with more practices using different software would produce data more representative of UK general practice, and inform whether the findings of this audit are generalisable. Examination of the entire patient record for all, rather than selected, variables would provide information on the proportion of correctly coded data. Investigation of which codes practitioners commonly use would enable disease registers to be better aligned with codes used to record clinical data in practice. Economic evaluation is

needed so that we can learn whether the enormous effort being made to capture data into computer records does more for patient care in the long term (by making it possible to recall patients, having data for health service planning, and so on) and is of more benefit to patients than investing in increased time being spent on patient care.

Conclusions

The UK National Health Service aims to raise quality standards through a primary care contract which includes financially incentivised quality-based targets for improved chronic disease management. This audit highlights a potential gap between relatively simplistic measures of quality, recommendations for best practice and the care being delivered. Research is needed to discover whether the issues identified here are generalisable and how the Quality and Outcomes Framework might be better aligned with delivering best practice.

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CONFLICTS OF INTEREST

None.

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